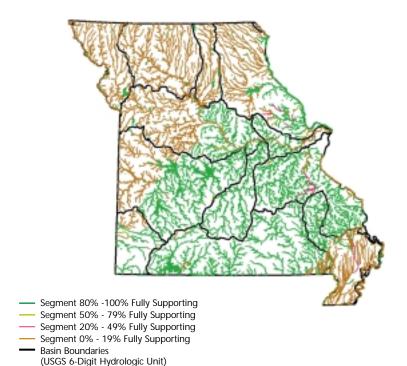
### Missouri



This map depicts aquatic life use support status.

For a copy of the Missouri 1998 305(b) report, contact:

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### **Surface Water Quality**

Almost half of Missouri's rivers and streams have impaired aquatic habitat due to a combination of factors including natural geology, climate, and agricultural land use. As a result of these factors, many streams suffer from low water volume, organic enrichment, and excessive siltation. In lakes, low dissolved oxygen from upstream dam releases, pesticides, and metals are the most common ailments. Agriculture, reservoir releases, contaminated sediments, and urban runoff are the leading sources of lake degradation.

The Missouri Department of Health advises that the public restrict consumption of bottom-feeding fish (such as catfish, carp, and suckers) from urban waters and non-Ozark streams or lakes to 1 pound per week due to concentrations of chlordane, PCBs, and other contaminants in these fish.

Missouri did not report on the condition of wetlands.

#### **Ground Water Quality**

In general, ground water quantity and quality increases from north to south and west to east. Deep ground water aguifers in northern and western Missouri are not suitable for drinking water due to high concentrations of minerals from natural sources. Nitrates and, to a much lesser extent, pesticides also contaminate wells in this region. About one-third of the private wells exceed drinking water standards for nitrates, and about 2% of private wells exceed drinking water standards for either atrazine or alachlor. Statewide, the highest priority concerns include ground water contamination from septic tanks, pesticide and fertilizer applications, and underground storage tanks.

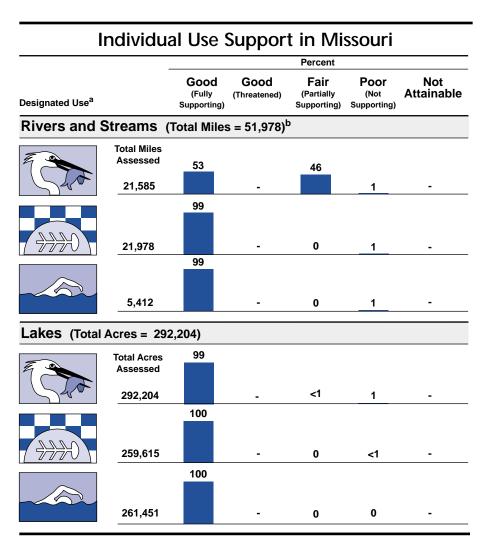
# Programs to Restore Water Quality

Sewage treatment plant construction has restored many surface waters in Missouri, but point sources still impact about 90 classified stream miles. The Missouri Clean Water Commission has revised its regulations to bring confined animal operations into the point source permit program consistent with federal requirements. Nonpoint source control efforts have been greatly expanded over the past few years. With a focus on agriculture, approximately \$2 million annually is spent for statewide informational programs, technical assistance and demonstrations on a regional and local basis, and BMP implementation in local watersheds. A dedicated state sales tax provides an additional \$28 million annually for watershed-level soil erosion control programs.

# Programs to Assess Water Quality

Missouri's water quality monitoring strategy features approximately 40 fixed-station chemical ambient monitoring sites, short-term intensive chemical monitoring studies, a rapid visual/aquatic invertebrate assessment program and detailed biological sampling in support of development of biocriteria. The state also reviews water quality monitoring data and published studies done by others.

Missouri requires toxicity testing of effluents for all major dischargers; has a fish tissue monitoring program for selected metals, pesticides and PCBs; and monitors river sediments for toxic metals and organics and sediment pore water for toxicity. Several nonpoint source watershed projects related to management of manure or farm chemicals have their own monitoring programs.



<sup>-</sup> Not reported in a quantifiable format or unknown.

Note: Figures may not add to 100% due to rounding.

<sup>&</sup>lt;sup>a</sup> A subset of Missouri's designated uses appear in this figure. Refer to the state's 305(b) report for a full description of the state's uses.

<sup>&</sup>lt;sup>b</sup>Includes nonperennial streams that dry up and do not flow all year.